MISCELLANEOUS PAPERS

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The Republic Day is a public holiday in Turkey commemorating the proclamation of the Republic of Turkey on 29 October 1923 *********************

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Description of a new species in the genus *Butleronea* Viette in the mainland of Africa (Lepidoptera, Noctuidae)

Muhabbet Kemal¹ Ahmet Ömer Kocak

Abstract: Description of a new species in the genus *Butleronea* Viette in the mainland of Africa (Lepidoptera, Noctuidae). Misc. Pap. 216: 1-5, 6 figs. 1 map

In this paper, a new species Butleronea umay sp. n. is described and illustrated from South Africa, Soutpansberg Mountains. The genus Butleronea is first reported here from the mainland of Continent Africa. A map for the species is also added.

Key words: Butleronea, umay, Noctuidae, Lepidoptera, description, South Africa.

During the expeditions to Soutpansberg Mountains (northern South Africa), realized privately by the authors in 2003, nocturnal specimens of a species of the genus Butleronea Viette, 1968, were collected. After the comparison with the sole and type-species Butleronea tsara Viette, 1968 of the genus described from Madagascar, we came to the conclusion that this species of Butleronea is new to science taxonomically; while the genus is new record for the fauna of the mainland of Africa Continent, as well as the Republic of South Africa. Description and other information are given below:

Butleronea umay sp. n.

http://zoobank.org/NomenclaturalActs/oDBB4BF3-7468-48B2-98DE-E48465FE0621

Description

Holotype (male)

Body:

Head: Frons, vertex, base of antennae with creamy, hairy scales. Antenna filiform. Proboscis developed, brown.

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We hope that this very troubled process, we are experiencing due to the coronavirus pandemic, is over as soon as possible by using the scientific methods not by praying, if it is natural. We wish most of us to return to our happy and healthy days again.

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<u>Thorax</u>: Patagia and tegulae with whitish scales. Legs usually covered by yellowish hairs, black with creamy rings.

Abdomen: Elongated, lateral organs with long yellowish hairs located about the middle of abdomen.

Measurements: Forewing: 13.5mm, wingspan: 29mm.

Comparative description of wings:

<u>Upperside forewing</u>: Main colouration dirty brown with some black striae; basal postdiscal and submarginal area ornamented with whitish scales similar to *tsara*. Black marginal line incomplete (complete in *tsara*). Ciliae white, chequered with black.

<u>Underside forewing</u>: Dark markings similar to those of *tsara*. Yellowish colouration highly reduced, confined basally (well and widely developed in *tsara*). Discal spot hardly visible, almost crescent (better developed, roundish in *tsara*). Underside hindwing: Ground colour creamy white (yellow in *tsara*).

<u>Upperside hindwing</u>: Yellow. Apical area suffused with brownish scales (absent in *tsara*). Dark brown marginal line almost complete (absent in *tsara*). Brownish anal spot developed (absent in *tsara*). Slightly chequered ciliae pure white (pure yellow in *tsara*).

<u>Underside hindwing</u>: Ground colour and ciliae creamy white (yellow in *tsara*). Discal spot crescent (round in *tsara*). Irregular postdiscal dark markings almost complete (developed only at apical half in *tsara*).

Paratypes (4 $\stackrel{\frown}{}$ $\stackrel{\frown}{}$ $\stackrel{\frown}{}$ $\stackrel{\frown}{}$). Males similar to holotype in appearance, but sizes variable: forewing: 12mm, wingspan: 27mm. In females, dark markings of wings variable; wing sizes larger than males: forewing: 15-17mm, wingspan: 31-35mm.

<u>Male genitalia</u> (Fig. 3): In general, it resembles to that of *tsara*. Uncus slender, sickle-shaped, pointed at tip. Shapes of valva, sacculus, vinculum and tegumen are similar to those of *tsara* to some degree. But clasper weakly developed and almost straight (strongly curved in *tsara*). Shape of aedeagus similar but there are some differences on the serrated plate and the arrangement of the spines on vesica.

<u>Female genitalia</u> (Fig. 6): Anal papillae developed, almost triangular. Anterior and posterior apophyses equal in length. Ostium bursae large, ductus bursae slightly elongated, corpus bursae membraneous, subspherical without markings but fine punctuated, not striated as in *B. tsara*.

Closely related species: The new species is near to *Butleronea tsara* Viette,1968 (type species of *Butleronea*). The holotype (male) of *tsara* was illustrated by Prins & Prins (2020). The new species is easily distinguishable from it externally by more developed dark submarginal markings on the upperside of hindwings, different shaped dark markings and colouration of the both wings in both sexes. More prominent characters are seen in the male genitalia. The shapes of the clasper, valva and aedeagus in the male genitalia of the new species are different (Fig.3) (*cf.* Viette, 1968: fig.1). Ductus bursae of new species (Fig.6) is shorter than that of *tsara* Viette (*cf.* Viette, 1968: fig.2). Parallel lines on corpus bursae absent in the new species (Fig.6) (*cf.* Allotype \mathcal{P} genitalia, Genitalia Slide by P. Viette 4832, illustrated by Prins & Prins, 2020)

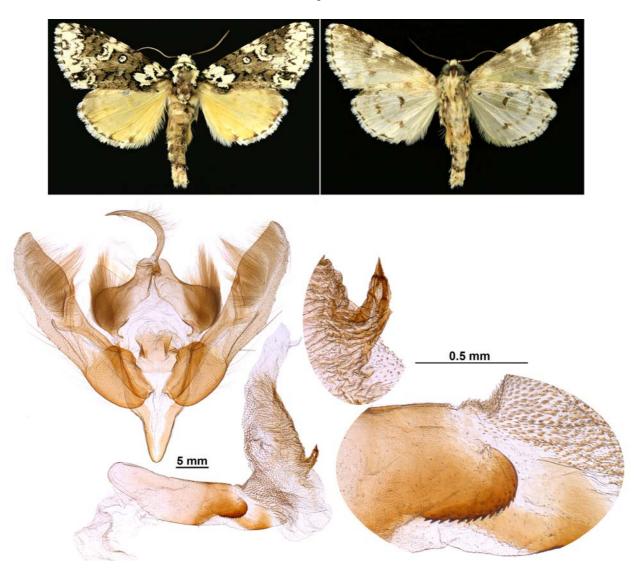
<u>Etymology</u>: The scientific name "*umay*" is based upon the name of Goddess of the mothers and the children in the Uyghur Mythology.

<u>Material studied</u>: $3 \circlearrowleft \circlearrowleft$ (incl. holotype) and $5 \hookrightarrow \hookrightarrow$ (paratypes): South Africa: Limpopo (=Transvaal), Soutpansberg Mts., Medike 820m, savanna, 27.xi.2003, M. Kemal & A.Koçak leg. (Coll. Cesa).

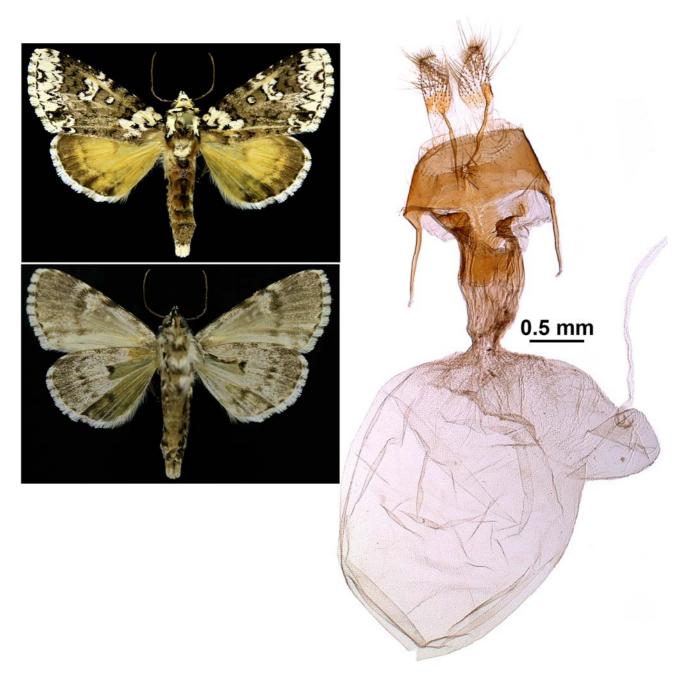
Habitat: Savanna (Bushveld).

Adult: Nocturnal, flight time: Late November.

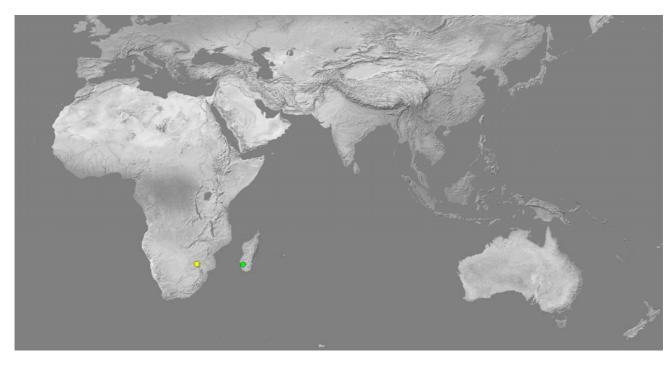
Range: Known only from northern part of South African Republic (Map 1).



Figs. 1-3. Butleronea umay **sp. n.** (Holotype): Upperside and underside of the male (above), male genitalia and removed aedeagus with enlarged parts (GP3302). M. Kemal (Cesa)



Figs. 4-6. Butleronea umay **sp. n.** (Paratype $\$): Upperside and underside of the female (left), female genitalia (GP3303) (right). M. Kemal (Cesa)



Map 1 - Butleronea umay sp.n. (yellow), Butleronea tsara (green).

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A new *Ethmia* species for the fauna of the mainland of Africa (Lepidoptera, Ethmiidae)

Muhabbet Kemal² Ahmet Ömer Koçak

Abstract: A new *Ethmia* species for the fauna of the mainland of Africa (Lepidoptera, Ethmiidae). *Misc. Pap.* 216: 6-8, 4 figs. 1 map.

In this paper, *Ethmia ampanella* Viette described from Madagascar is reported from mainland of Africa faunistically. The status of *griveaudi* Viette from Comores is discussed and proposed as junior synonym of *ampanella* Viette. The adult and the male genitalia of the species are also illustrated. A map for the species is also added.

Key words: Ethmia ampanella, griveaudi, Ethmiidae, Lepidoptera, South Africa, Soutpansberg, Medike, Comores, Madagascar, fauna.

The Palaeotropical studies within the Cesa projects has been reminded recently with brief information (Kemal & Koçak, 2020a-b). The scientific results of the evaluating the material collected by the authors from Ethiopia in 1996 and from South Africa (Transvaal) in 2003-2004 will be published at irregular intervals. Within this program, a new species of *Butleronea* was published in the present issue of this serial (Kemal & Koçak, 2020c). In the present paper, an Ethmiid species unknown from mainland of Africa is reported faunistically.

Ethmia ampanella was described by Viette (1976: 241) from South Madagascar (Ampanihy). Viette (1976: 242) described also a new subspecies *griveaudi* from Comores within the same species. Mey & Shovkoon (2014: 106) mentioned the type-locality of this species as Comores incorrectly. They omitted *griveaudi*, which was described by Viette (1976) from Comores.

The authors collected a good series of *Ethmia* species from Savanna (Bushveld) habitat near Medike, Soutpansberg Mts. (Northern South Africa). The male genitalia (Fig.1) fits well the male genitalia of the holotype, illustrated by Viette (1976). Therefore, we identified this species as *Ethmia ampanella* Viette,1976 (Figs. 1-4). This is new faunistical record for the mainland of Africa and Republic of South Africa (Map 1).

Externally the specimens collected show variability to some degree. Wing size is also variable. Between subspecies of a species, the gene flow should continue. Only the size and some morphological differences are not enough for the subspecific distinction. It must be based on convincing, not only morphological but also molecular evidences, if available. The wing sizes of the specimens of *Ethmia ampanella* found at Medike from 11 to 12.5mm of forewing, from 24 to 26.5mm of wingspan (*cf.* the sizes of *ampanella* and *griveaudi* given by Viette (1976)). Under these circumstances, we propose here the name *griveaudi* Viette, 1976 from Comores as junior subjective synonym of *ampanella* Verity, 1976 from Madagascar (**syn. nov.**).

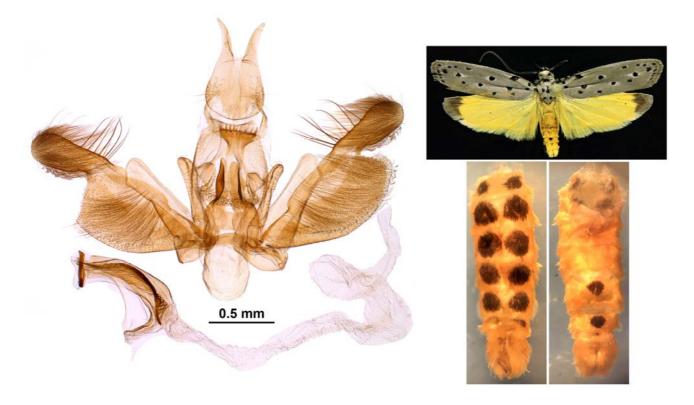
Remarkable blackish abdominal markings, which are variable in size to some degree, are illustrated here for the first time. On dorsal side, they are located singly. Ventrally, 6 pairs more or less developed markings are located ventro-laterally (Figs. 3.4).

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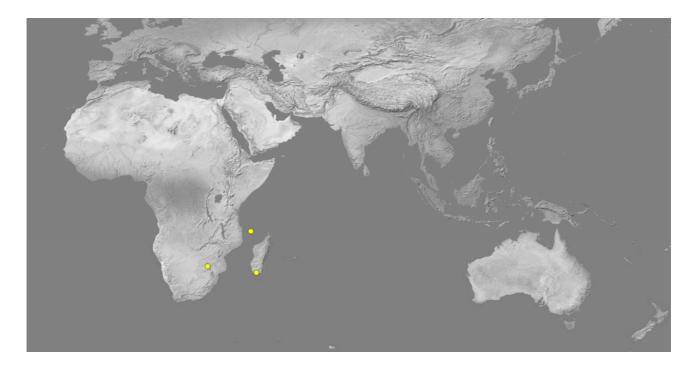
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<u>Material studied</u>: 6 specimens: South Africa, Limpopo (=Transvaal), Soutpansberg Mountains, Medike 820m, Savanna, 25.xi.2003, M. Kemal & A.Koçak leg. (Coll. Cesa)



Figs. 1-4 – *Ethmia ampanella*. Male genitalia, aedeagus removed (GP3301) (left). Upperside of male (top right). Markings on abdomen: before dissecting, ventral and dorsal sides of abdomen during free floating in alchohol (bottom right). South Africa, Soutpansberg Mts., Medike. M. Kemal (Cesa).



Map 1 – Ethmia ampanella (marked yellow) from South Africa (Medike), South Madagascar (Ampanihy) and Comores

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